

TSD SBC Standard Test Report

Introduction

This test report is presented to demonstrate the functionality of the tested Single Board Computer (SBC), in terms of hardware, operating system, and basic function. There is no guarantee that parts or devices of the same functions will perform the same way. However, since all the parts and devices used in the testing covers almost the range of those elements used in a basic computer system, this report should stand as a reference guide to show the supporting capability of the tested SBC.

Product Model ROBO-658

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System Default Configuration	
SBC & Version	ROBO-658 (R2M0E2)
BIOS Version	R1.01
Backplane	ACTI-14P4
CPU	Intel PIII-850E
RAM	PC133, 256MB *1
Floppy	1.44MB
IDE HDD	Quantum 5.1GB
SCSI HDD	Seagate 9.1GB
CD-ROM	32X
VGA adaptor	Intel i810e (on board)
Ethernet adaptor	Intel 82559 (on board)
SCSI adaptor	Adaptec 7892 (on board)
Power Supply	PW-300ATX
DiskOnChip	N/A
Other	N/A

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Microsoft Operating System Installation Test							
OS	Windows-95		Windows-98		Windows-NT 4.0		Windows-2000
	English	Japan	English	Japan	English	Japan	
Installation	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Service Pack 5	X	X	X	X	PASS	PASS	X
VGA driver (Intel i810e)	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Ethernet driver (Intel 82559)	PASS	PASS	PASS	PASS	PASS	PASS	PASS
SCSI driver (Adaptec7892)	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Sound driver (Creative1371)	PASS	PASS	PASS	PASS	PASS	PASS	PASS
USB Update	PASS	PASS	X	X	X	X	X
PCI Bridge Update	PASS	PASS	X	X	X	X	X

* USB Update and PCI Bridge Update are only for Windows-95. Windows-95 requires these updates to pick up the latest chipset component drivers for Intel 82440BX, 82440GX, 82810E, 82840, and 82815E chipsets.

Basic BIOS Function Test		
Test Items	Result	Remarks
Boot up sequence	PASS	FDD/IDE/CDROM/SCSI/DOC
Automatic HDD detection	PASS	40 GB
Load in default BIOS setting	PASS	
Save & Exit	PASS	
Disable FDD	PASS	
Disable COM port 1/2/3/4	PASS	
Disable IDE1/2	PASS	
Disable Parallel port	PASS	

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Y2K Utility Test			
<i>Test Items</i>	<i>AMI2000</i>	<i>TEST2000</i>	<i>Y2000</i>
BIOS 2000 Roll-Over	PASS	PASS	PASS
RTC 2000 Roll-Over	PASS	PASS	X
BIOS 2000 Leap Year	PASS	PASS	PASS
BIOS 2001 Non-Leap Year	PASS	PASS	PASS
BIOS 2002 Non-Leap Year	PASS	PASS	PASS
BIOS 2003 Non-Leap Year	PASS	PASS	PASS
BIOS 2004 Non-Leap Year	PASS	PASS	PASS
BIOS 2005 Non-Leap Year	PASS	PASS	PASS
BIOS 2006 Non-Leap Year	X	X	PASS
BIOS 2007 Non-Leap Year	X	X	PASS
BIOS 2008 Non-Leap Year	X	X	PASS
BIOS 2000 Non-Leap Year	X	X	PASS
BIOS Compatibility	X	PASS	X
RTC Reboot Roll-Over	X	PASS	X
RTC 2000 Operation	X	PASS	X

Other Compatibility Tests		
<i>Test Items</i>	<i>Result</i>	<i>Remarks</i>
Fastest PPGA Celeron	X	FSB <u>66</u> Mhz CPU Speed <u> </u> Mhz
Fastest FC-PGA Celeron	X	FSB <u>66</u> Mhz CPU Speed <u> </u> Mhz
Fastest FC-PGA PIII	PASS	FSB <u>100</u> Mhz CPU Speed <u>850E</u> Mhz
Start system w/o K/B	PASS	Reconnect keyboard after boot up (X)
HDD Detection	PASS	Maximum size <u>40</u> GB
AT Power	PASS	<u>110</u> V <u>300</u> W
ATX Power	PASS	Soft-off Windows-95 => <u>PASS</u> Soft-off Windows-98 => <u>PASS</u> Soft-off Windows-2000 => <u>PASS</u> Soft-off Linux => <u>PASS</u>
Power button function	PASS	On-Off => <u>PASS</u> Suspend (Display/HDD) => <u>PASS</u>
QNX 4.25 Installation	X	

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Test Items	Result	Remarks
Linux Installation Version <u>6.2</u>	PASS	Video driver <u>PASS</u> Ethernet driver <u>PASS</u>
SCO OpenServer V5.2 Installation	PASS	
SCO Unixware V7.0 Installation	PASS	
IRQ Management	PASS	IRQ #3, #4, #5, #7, #9, #10, #11, #14, #15
S3 PCI VGA card (Savage4 / 32MB)	PASS	Primary PCI slot #1 =>PASS Primary PCI slot #2 =>PASS Primary PCI slot #3 =>PASS Primary PCI slot #4 =>PASS
C&T PCI VGA card (C&T 65550)	PASS	Primary PCI slot #1 =>PASS Primary PCI slot #2 =>PASS Primary PCI slot #3 =>PASS Primary PCI slot #4 =>PASS
PCI Ethernet card x 4 in Windows-NT 4.0	PASS	Primary PCI slot #1 =>PASS Primary PCI slot #2 =>PASS Primary PCI slot #3 =>PASS Primary PCI slot #4 =>PASS
Transfer 100MB file through Network card	PASS	Windows-95 => <u>PASS</u> Windows-98 => <u>PASS</u> Windows-NT 4.0 => <u>PASS</u> Windows-2000 => <u>PASS</u>
Transfer 100MB file through SCSI card from IDE HDD to SCSI HDD	PASS	Windows-95 => <u>PASS</u> Windows-98 => <u>PASS</u> Windows-NT 4.0 => <u>PASS</u> Windows-2000 => <u>PASS</u>
Cirrus Logic ISA VGA Card	X	ISA Slot => _____
Timer counting in BIOS	PASS	<u>2</u> Minutes => <u>PASS</u>

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Test Items	Result	Remarks
High resolution video detection for VGA over 2nd PCI slot	PASS	Windows-95 =>(1024*768, 24Bit) Windows-98 =>(1024*768, 24Bit) Windows-NT 4.0=>(1024*768, 24Bit) Windows-2000=>(1024*768, 24Bit)
Apply all RAM banks with 256 MB SDRAM (buffered/non-buffered)	PASS	Windows-98/NT 4.0 => 2 x 256MB Windows-95/Linux => 2 x 256MB Windows-2000 => 2 x 256MB
Windows Invalid Shutdown Test	PASS	Windows-95 => <u>PASS</u> Windows-98 => <u>PASS</u> Windows-NT 4.0 => <u>PASS</u> Windows-2000 => <u>PASS</u>
Mouse + K/B detection under Windows-NT 4.0	PASS	
BIOS UDMA report with ATA/66 HDD	X	

(End of Report)